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EXAMINER	
GARY, ERIKA A	

ART UNIT	PAPER NUMBER
2617	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/715,001	DYER, MEDFORD ALAN	
	Examiner	Art Unit	
	Erika A. Gary	2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *08/24/10*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-28* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-28* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1, 2, 23 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Frank et al., US Patent Number 5,991,646 (hereinafter Frank) in view of Applicant's submission of prior art, Bunting et al., US Patent Number 4,237,339 (hereinafter Bunting).

Regarding claim 1, Frank discloses a speakerphone comprising: a housing; a speaker coupled to said housing; a microphone boom pivotably coupled to said housing, said microphone boom having at least a first position and a second position; and a microphone mounted to said microphone boom [col. 1: line 62 – col. 2: line 14].

What Frank does not specifically disclose is wherein a region of said microphone having a lowest sensitivity is aimed at said speaker when said microphone boom is located in said first position and said region is aimed at said speaker when said microphone boom is located in said second position. However, Bunting teaches this limitation [col. 1: lines 48-55].

At the time of the invention, it would have been obvious to one of ordinary skill in the art to modify Frank to include Bunting. The motivation for this combination, as

suggested by Bunting, would have been to position the microphone and speaker in a manner that alleviates feedback problems [col. 1: lines 43-46].

Regarding clam 2, Bunting teaches wherein said speaker is located along an axis extending from said region of said microphone regardless of a position associated with said microphone boom [col. 2: lines 4-6].

Regarding claim 24, Frank discloses wherein the microphone comprises a unidirectional microphone [fig. 6: ref 101].

Regarding claim 24, Bunting discloses wherein the microphone exhibits a cardioid polar pattern [col. 2: lines 4-6].

3. Claims 3-10, 16, and 20-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kim et al., US Patent Application Publication Number 2004/0229658 (hereinafter Kim) in view of Bunting.

Regarding claims 3 and 22, Kim discloses a speakerphone comprising: a housing; a speaker mounted to said housing; a unidirectional microphone; a microphone boom pivotably coupled to said housing, said microphone boom capable of being placed at a plurality of positions, said unidirectional microphone mounted at a distal end of said microphone boom; and a wireless networking module adapted to transmit first signals via a short distance wireless network to a peripheral electronic device and to receive second signals via said short distance wireless network from said peripheral electronic device, wherein said first signals are initially received by said

unidirectional microphone, and wherein said second signals are output by said speaker after receipt by said wireless network module [paragraphs 0008, 0011-0012, 0016]

What Kim does not specifically disclose is wherein a region of said microphone having a lowest sensitivity is aimed at said speaker when said microphone boom is located in any of said plurality of positions. However, Bunting teaches this limitation [col. 1: lines 48-55].

At the time of the invention, it would have been obvious to one of ordinary skill in the art to modify Kim to include Bunting. The motivation for this combination, as suggested by Bunting, would have been to position the microphone and speaker in a manner that alleviates feedback problems [col. 1: lines 43-46].

Regarding claims 4-6, Kim teaches wherein said peripheral electronic device forwards said first signals via a long distance communication network and wherein said second signals are transmitted to said peripheral electronic device via said long distance communication network, wherein said long distance communication network is a cellular telephone network and said peripheral electronic device is a cellular telephone [paragraph 0036]

Regarding claim 7, Kim teaches said wireless networking module is a Bluetooth enabled networking module and said peripheral electronic device is a Bluetooth enabled cellular telephone [paragraph 0036].

Regarding claim 8, Kim teaches wherein said wireless networking module is a Bluetooth enabled networking module and wherein said peripheral electronic device further comprises a Bluetooth enabled adaptor [paragraph 0036].

Regarding claim 9, Kim teaches wherein said wireless networking module is an IEEE802.11 enabled networking module and said peripheral electronic device is an IEEE802.11 enabled cellular telephone [paragraph 0036].

Regarding claim 10, Kim teaches wherein said wireless networking module is an IEEES02.11 enabled networking module and wherein said peripheral electronic device further comprises an IEEE802.11 enabled adaptor [paragraph 0036].

Regarding claim 16, Kim teaches a sound processor [paragraph 0029].

Regarding claim 20, Kim teaches a power switch [paragraph 0008].

Regarding claim 21, Kim teaches a volume control [paragraph 0008]

Regarding claims 25 and 27, Bunting teaches wherein the microphone exhibits a cardioid polar pattern [col. 2: lines 4-6].

Regarding claims 26 and 28, Bunting teaches wherein the microphone is most sensitive to sound arriving from only one direction [col. 1: lines 50-55].

4. Claims 3-22, and 25-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Laurila, US Patent Application Publication Number 2004/0204168 (hereinafter Laurila) in view of Kim and further in view of Bunting.

Regarding claims 3 and 22, Laurila discloses a speakerphone comprising: a housing; a speaker mounted to said housing; a unidirectional microphone; a microphone boom coupled to said housing, said unidirectional microphone mounted at a distal end of said microphone boom; and a wireless networking module adapted to transmit first signals via a short distance wireless network to a peripheral electronic

device and to receive second signals via said short distance wireless network from said peripheral electronic device, wherein said first signals are initially received by said unidirectional microphone, and wherein said second signals are output by said speaker after receipt by said wireless network module [paragraphs 0001, 0005, 0019]

What Laurila does not specifically disclose is that the microphone boom is pivotably coupled to the housing and capable of being placed in a plurality of positions. However, Kim teaches this limitation [paragraph 0008]. At the time of the invention, it would have been obvious to one of ordinary skill in the art to make the microphone boom pivotal in order to increase ease of use for the user.

Further the combination of Laurila and Kim does not specifically disclose is wherein a region of said microphone having a lowest sensitivity is aimed at said speaker when said microphone boom is located in any of said plurality of positions. However, Bunting teaches this limitation [col. 1: lines 48-55].

At the time of the invention, it would have been obvious to one of ordinary skill in the art to modify the combination of Laurila and Kim to include Bunting. The motivation for this combination, as suggested by Bunting, would have been to position the microphone and speaker in a manner that alleviates feedback problems [col. 1: lines 43-46].

Regarding claims 4-6, Laurila teaches wherein said peripheral electronic device forwards said first signals via a long distance communication network and wherein said second signals are transmitted to said peripheral electronic device via said long distance communication network, wherein said long distance communication network is

a cellular telephone network and said peripheral electronic device is a cellular telephone [paragraph 0021]

Regarding claim 7, Laurila teaches said wireless networking module is a Bluetooth enabled networking module and said peripheral electronic device is a Bluetooth enabled cellular telephone [paragraphs 0020-0021].

Regarding claim 8, Laurila teaches wherein said wireless networking module is a Bluetooth enabled networking module and wherein said peripheral electronic device further comprises a Bluetooth enabled adaptor [paragraphs 0020-0021

Regarding claim 9, Laurila teaches wherein said wireless networking module is an IEEE802.11 enabled networking module and said peripheral electronic device is an IEEE802.11 enabled cellular telephone [paragraphs 0020-0021].

Regarding claim 10, Laurila teaches wherein said wireless networking module is an IEEES02.11 enabled networking module and wherein said peripheral electronic device further comprises an IEEE802.11 enabled adaptor [paragraphs 0020-0021].

Regarding claim 11, Laurila teaches at least status indicator [paragraphs 0021-0023].

Regarding claims 12-15, Laurila teaches a display means coupled to said housing to display data [paragraph 0021]

Regarding claim 16, Laurila teaches a sound processor [paragraph 0005].

Regarding claim 17, Laurila teaches a portable power source [see claims 10-11].

Regarding claim 18, Laurila teaches means for coupling an external power source to said speakerphone [see claims 10-11].

Regarding claim 19, Laurila teaches means for coupling a mounting bracket to said housing [paragraph 0023].

Regarding claim 20, Kim teaches a power switch [paragraph 0008].

Regarding claim 21, Kim teaches a volume control [paragraph 0008]

Regarding claims 25 and 27, Bunting teaches wherein the microphone exhibits a cardioid polar pattern [col. 2: lines 4-6].

Regarding claims 26 and 28, Bunting teaches wherein the microphone is most sensitive to sound arriving from only one direction [col. 1: lines 50-55].

Double Patenting

5. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422

F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

6. Claims 3-22, and 25-28 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-33 of U.S. Patent No. 7,620,433 in view of Bunting.

Regarding independent claims 3 and 22, Bodley (US Patent Number 7,620,433) discloses a speakerphone comprising: a housing; a speaker mounted to said housing; a unidirectional microphone; a microphone boom pivotably coupled to said housing, said microphone boom capable of being placed at a plurality of positions, said unidirectional microphone mounted at a distal end of said microphone boom; and a wireless networking module adapted to transmit first signals via a short distance wireless network to a peripheral electronic device and to receive second signals via said short distance wireless network from said peripheral electronic device, wherein said first signals are initially received by said unidirectional microphone, and wherein said second

signals are output by said speaker after receipt by said wireless network module [claims 1-4 and 8-10]

What Bodley does not specifically disclose is wherein a region of said microphone having a lowest sensitivity is aimed at said speaker when said microphone boom is located in any of said plurality of positions. However, Bunting teaches this limitation [col. 1: lines 48-55].

At the time of the invention, it would have been obvious to one of ordinary skill in the art to modify Bodley to include Bunting. The motivation for this combination, as suggested by Bunting, would have been to position the microphone and speaker in a manner that alleviates feedback problems [col. 1: lines 43-46].

Regarding dependent claims 4-21, Bodley teaches these in similar dependent claims 11-17, 21-25, and 29-31].

Regarding claims 25 and 27, Bunting teaches wherein the microphone exhibits a cardioid polar pattern [col. 2: lines 4-6].

Regarding claims 26 and 28, Bunting teaches wherein the microphone is most sensitive to sound arriving from only one direction [col. 1: lines 50-55].

Response to Arguments

7. Applicant's arguments filed August 24, 2010 have been fully considered but they are not persuasive. Applicant argues that the combination of Frank and Bunting does not teach a region of a microphone having a lowest sensitivity is aimed at a speaker when a microphone boom is located in a first position, and when the microphone boom

is located in the second position. However, the Examiner respectfully disagrees. Frank is relied upon to teach that the microphone boom has at least a first and a second position [col. 2: lines 1-4]. Bunting is relied upon to teach a region of a microphone having a lowest sensitivity is aimed at a speaker when a microphone boom is in position [col. 1: lines 48-55] in order to alleviate feedback problems [col. 1: lines 43-46]. Therefore, based on Bunting teaching, it would have been obvious to provide a region of the microphone having a lowest sensitivity to be aimed at the speaker for whatever position the boom is in.

Regarding the combination of Kim and Bunting, and the combination of Laurila, Kim and Bunting, Applicant argues that they do not teach a region of a microphone having a lowest sensitivity is aimed at a speaker when a microphone boom is located in any of said plurality of positions. However, the Examiner respectfully disagrees as Kim and Kim teaches the microphone boom is pivotably coupled to the housing and capable of being placed in a plurality of positions [paragraph 0008]. Bunting is relied upon to teach a region of a microphone having a lowest sensitivity is aimed at a speaker when a microphone boom is in position [col. 1: lines 48-55] in order to alleviate feedback problems [col. 1: lines 43-46]. Therefore, based on Bunting teaching, it would have been obvious to provide a region of the microphone having a lowest sensitivity to be aimed at the speaker for whatever position the boom is in.

Applicant also argues that neither Kim nor Laurila teaches a unidirectional microphone. However, it is inherent or at least obvious that the microphone can

comprise a unidirectional microphone as a specific type is not specifically disclosed in the prior art, therefore suggesting that a variety of microphone types can be used.

Conclusion

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Erika A. Gary whose telephone number is 571-272-7841. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dwayne Bost can be reached on 571-272-7023. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/EAG/
September 7, 2010

/Erika A. Gary/
Primary Examiner, Art Unit 2617